

ABSTRACT OF THE DISCLOSURE

Embodiments of the invention provide a method for effecting uniform silicon body height for silicon-on-insulator transistor fabrication. For one embodiment, a sacrificial oxide layer is disposed upon a semiconductor substrate. The oxide layer is etched to form a trench. The trench is then filled with a semiconductor material. The semiconductor material is then planarized with the remainder of the oxide layer and the remainder of the oxide layer is then removed. The semiconductor fins thus exposed are of uniform height to within a specified tolerance.